### **REMARKS**

This is in response to the Examiner's comments set forth in the Office Action of June 3, 2009. Claims 1-11 are currently pending.

A request for continued examination of the Application is respectfully requested.

# **The Office Action**

Claims 1-11 are rejected under 35 U.S.C. §102(b) as being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as being obvious over Jacobsen et al (U.S. Patent 5,391,371) ('371).

Claims 1-11 are rejected under 35 U.S.C. §102(e) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Henriksen et al. (U.S. Patent 6,610,519 ('519)).

Claims 1-2, 4-5 and 8 & 11 are rejected under 35 U.S.C. §102(e) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Backers (U.S. Pub 2004/0047897 (\*897)).

Claims 3, 7, and 9 are rejected under 35 U.S.C. §103(a) as being unpatentable over '897 in view of De Lima et al. (U.S. Patent 6,403,549).

### The Claims Distinguish Patentably Over the References

Claim 1 is directed to an animal food additive for economically useful animals which are pregnant, lactating, being fattened or raised, with a fraction of fibrillated, cellulose-containing fibers, wherein the additive comprises a crude fiber concentrate of fibrillated lignocellulose, wherein said additive limits food intake during ad-libitum feeding. A crude fiber concentrate of fibrillated lignocellulose is a natural raw material that is only treated mechanically. The chemical composition of lignocelluloses is approximately 50% cellulose, 25% hemicellulose, 25% lignin, and 3-5% resin and wax. Cellulose, is chemically produced from lignocellulose, and therefore is essentially free of lignin (approximately 90% cellulose and 10% hemicellulose). Lignin is a hydrophobic and acts as an obstacle for water absorption. As such, lignocellulose and cellulose include different properties and are not interchangeable as the Examiner sets forth. The most important difference between cellulose and lignocellulose is that lignocelluloses build the cell wall of wooden plants. These cell walls contain a cellulose frame mark in which lignin is built in. The cited references do not contain lignin-supported cell walls.

According to the Examiner, both '371 and '519 teach an animal feed additive that includes cellulose of the type claimed (ARBOCEL). However, '371 and '517 each teach of cellulose ARBOCEL BC 200, which is a product of pure cellulose (cellulose content of 100%). See Exhibit 1. In contrast, claim 1 recites that the additive is fibrillated <u>lignocellulose</u>, described in the specification as ARBOCEL Lignocellulose (lignocellulose content 65%) See Exhibit 3. Neither '371 nor '519 teaches or suggests the use of lignocellulose, or lignin in general, and '519 specifically states that ARBOCEL BC 200 is fibrous cellulose. Moreover, since lignin is hydrophobic, it is not to be expected that hydrophobic lignin would be better at water binding and swelling than hydrophilic, extracted, lignin-free cellulose, as described in '371 and '519. In addition, a skilled person in the art would have expected that the digestibility of the produced feed would also been reduced by lignocellulose; however, surprisingly, the digestibility of food is increased by using lignocellulose.

Similarly, with regard to '897, an additive of pure finely-divided cellulose is described that is purported to improve energy absorption and reduce ammonium content in the liquid mixture. '897 additionally teaches that using any other insoluble crude fiber material displays unwanted side effects such as binding of nutrients, reduction of mineral availability, and the like. Moreover, Trial Example 2, page 3, discloses that the additive is ARBOCEL BWW 40, which has a cellulose content of 99.5%. See Exhibit 2.

Accordingly, Applicant respectfully submits that the above-mentioned differences in the chemical structure of cellulose and lignocellulose patently distinguish the subject claims from the cited references above. In light of these differences, the properties attributed to the claimed additive, such as "limiting food intake," "water-retention capacity," "high swelling capacity," or "reduces energy content" are not inherent in the references as the Examiner asserts. Accordingly, the rejections should be withdrawn.

## **CONCLUSION**

For the reasons detailed above, it is respectfully submitted all claims remaining in the application (Claims 1-11) are now in condition for allowance.

Respectfully submitted,

Fay Sharpe LLP

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Date

Gregory S. Vickers, Reg. No. 45,180

Kimberly A. Textoris, Reg. No. 64,954

The Halle Building, 5th Floor

1228 Euclid Avenue

Name: Barbara Brazier

Cleveland, Ohio 44115-1843

216.363.9000

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